

Figure 1: (Prior Art) Tandem Connection

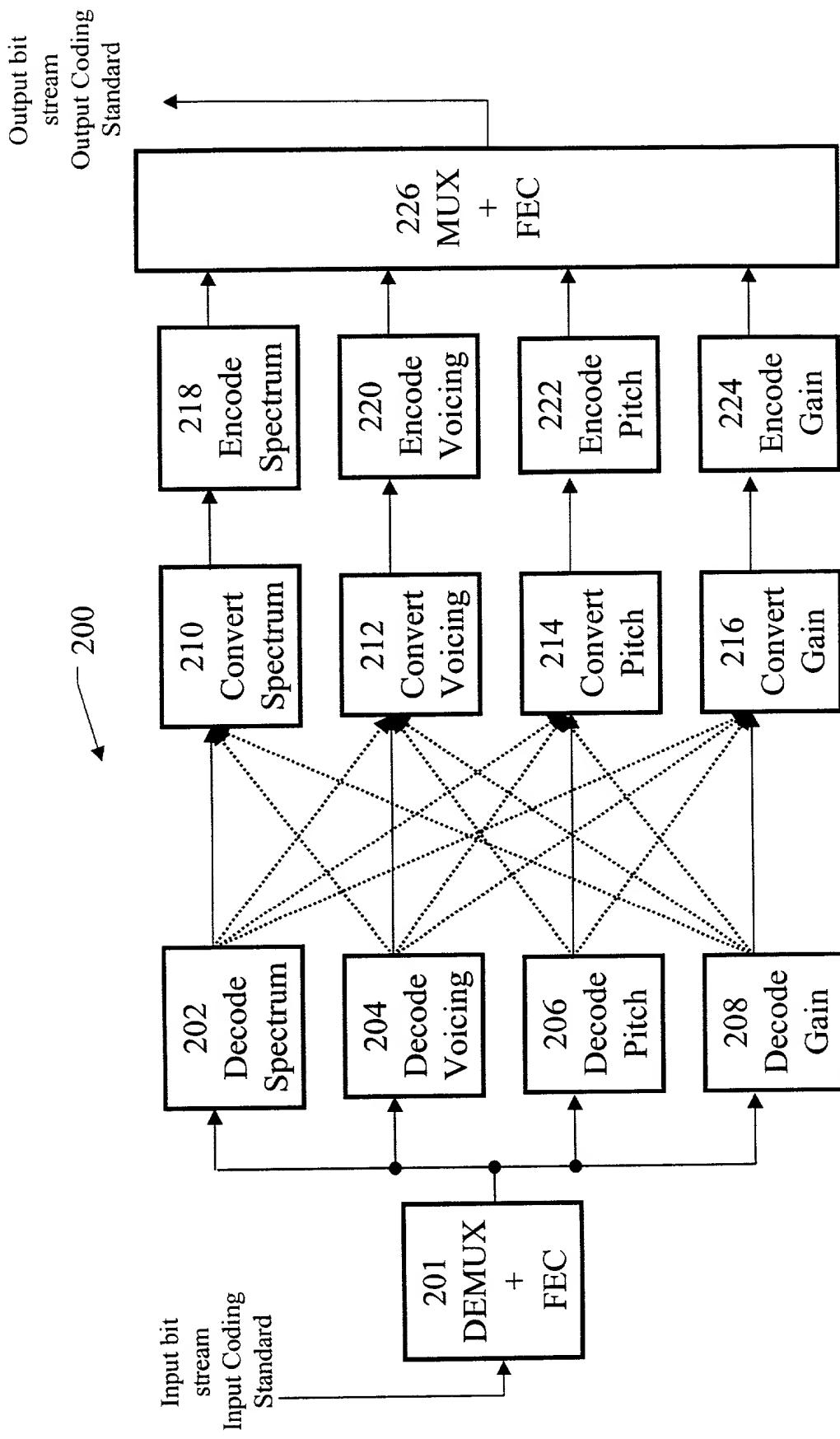


Figure 2: Universal Transcoder

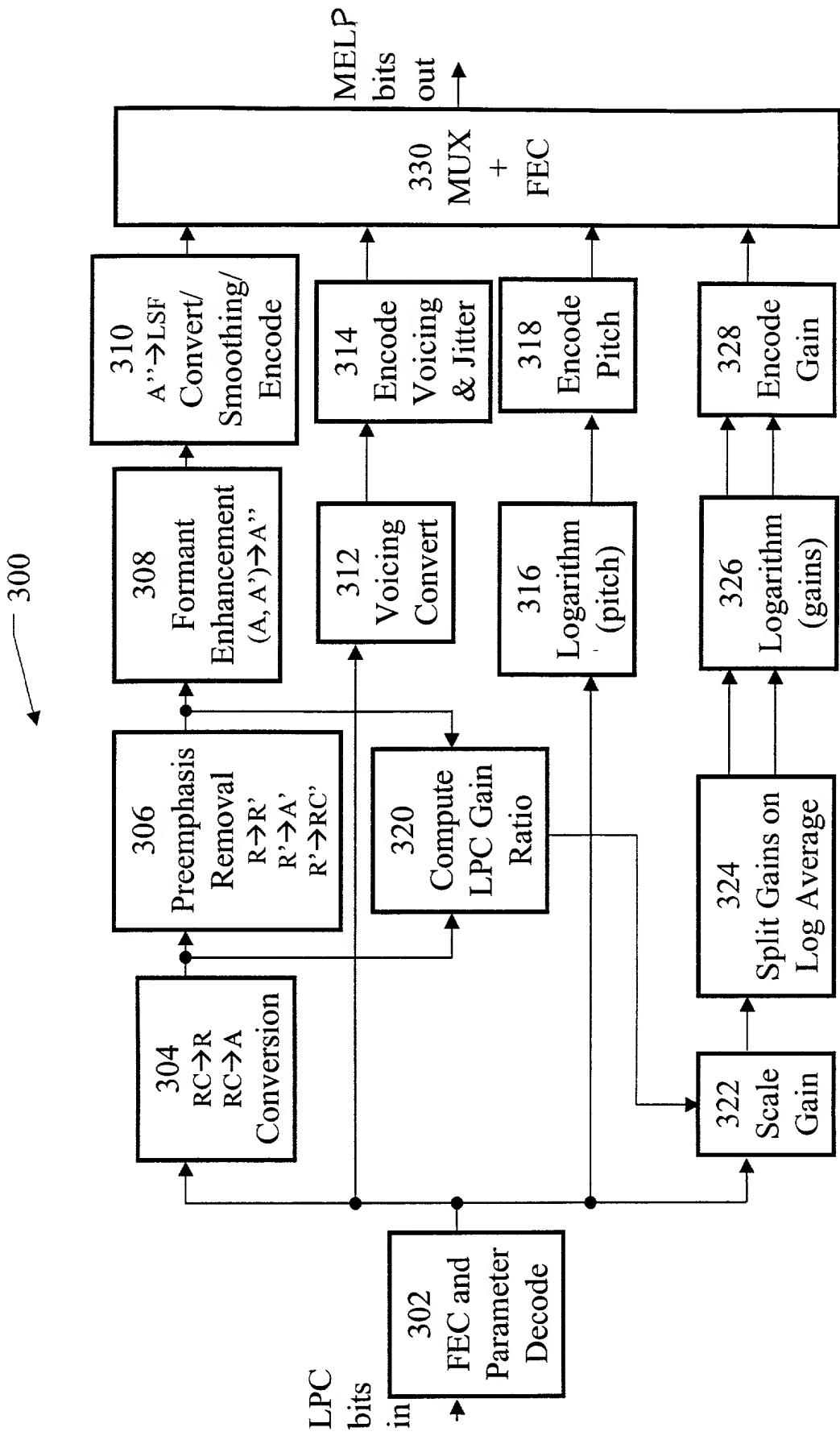


Figure 3: LPC to MELP Transcoder

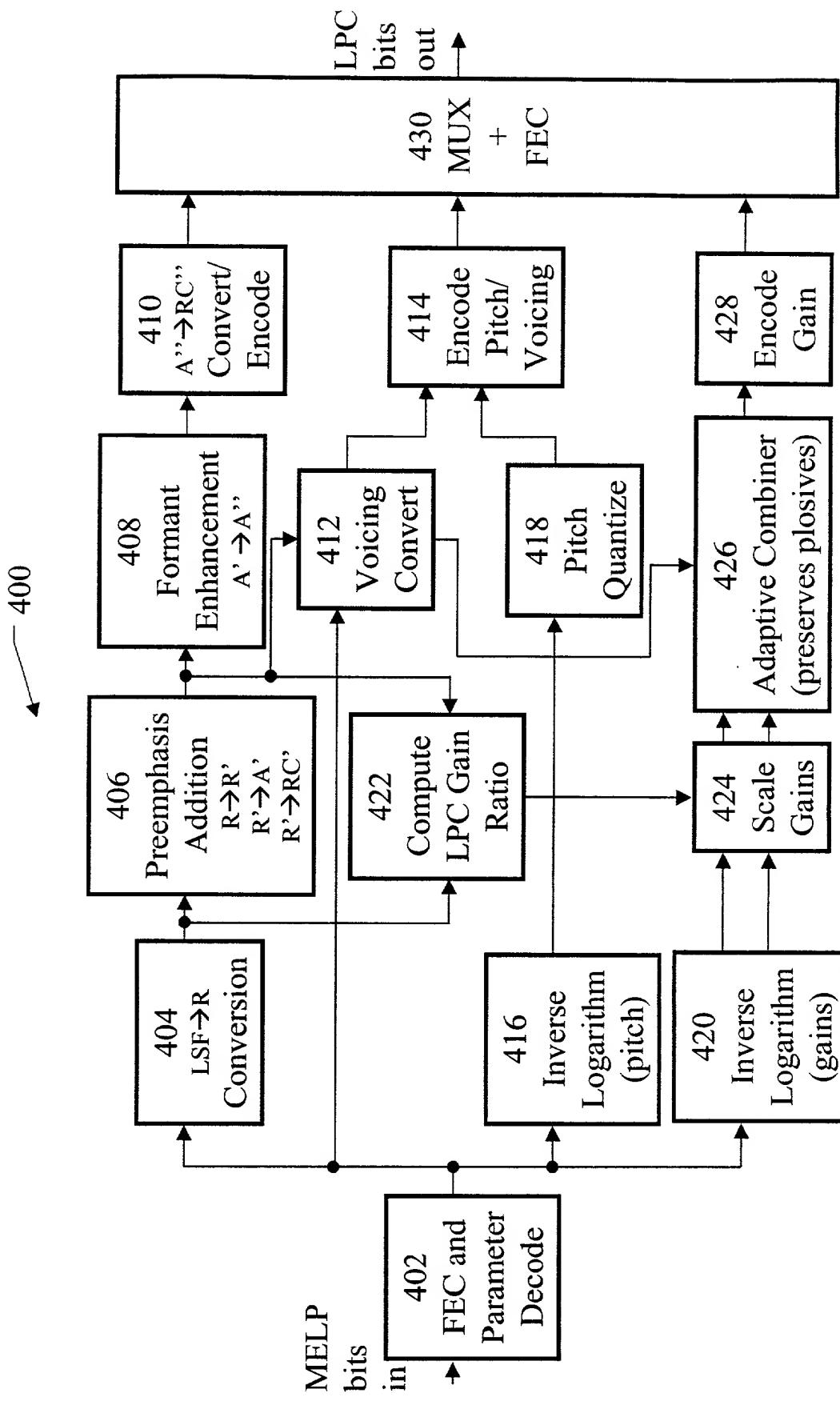


Figure 4: MELP to LPC-10 Transcoder

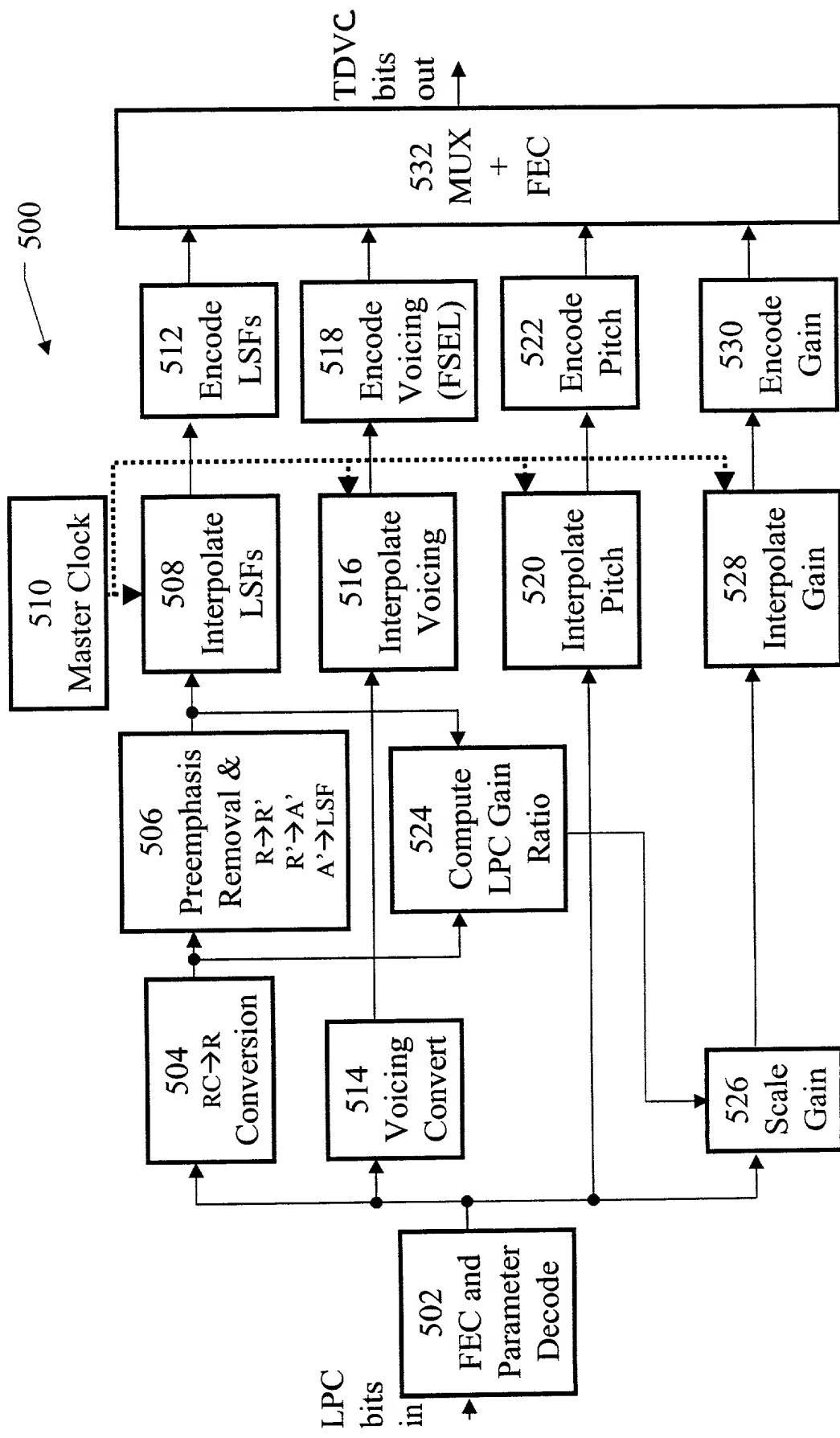


Figure 5: LPC-10 to TDVC Transcoder

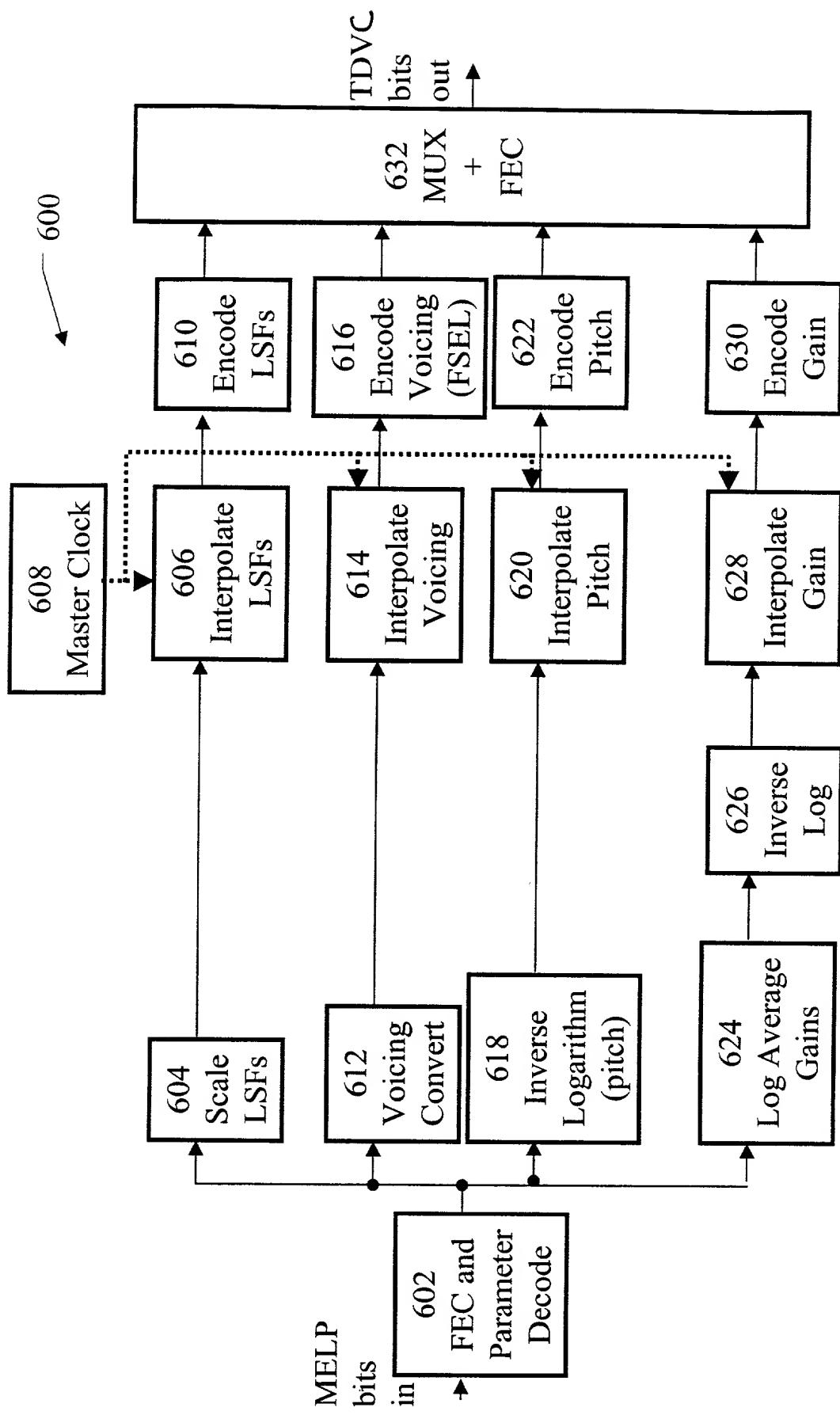


Figure 6: MELP to TDVC Transcoder

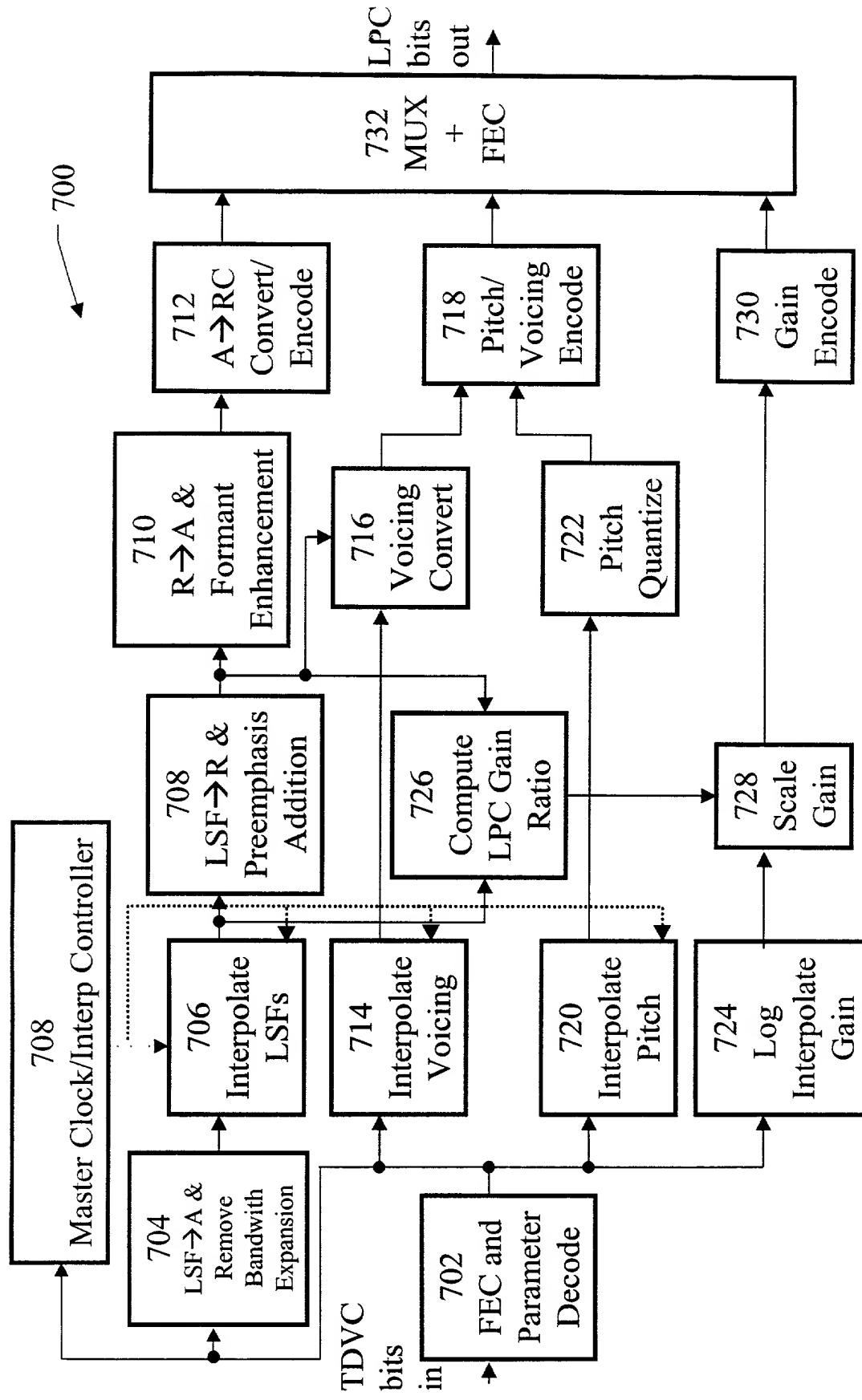


Figure 7: TDVVC to LPC-10 Transcoder

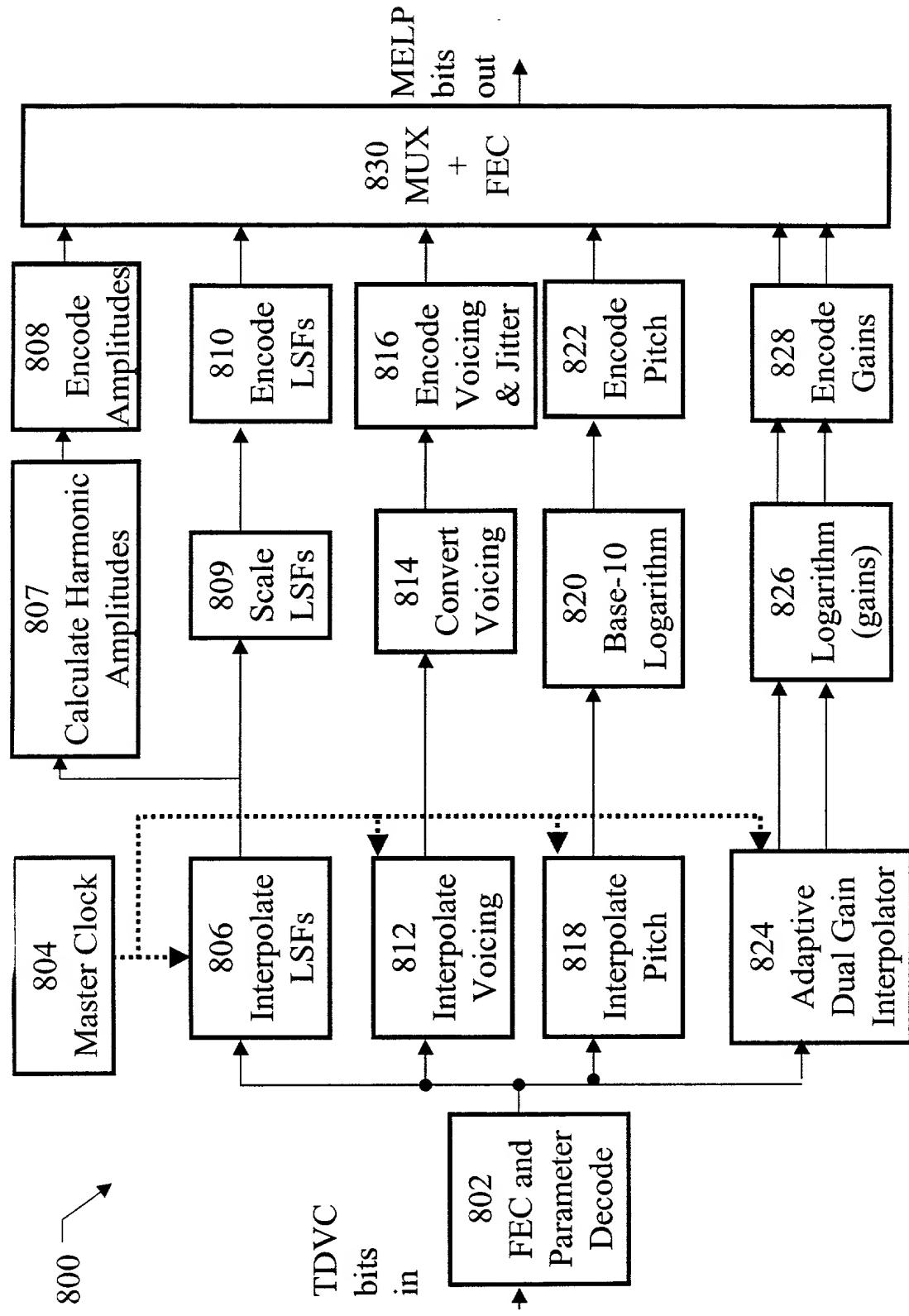


Figure 8: TDVVC to MELP Transcoder

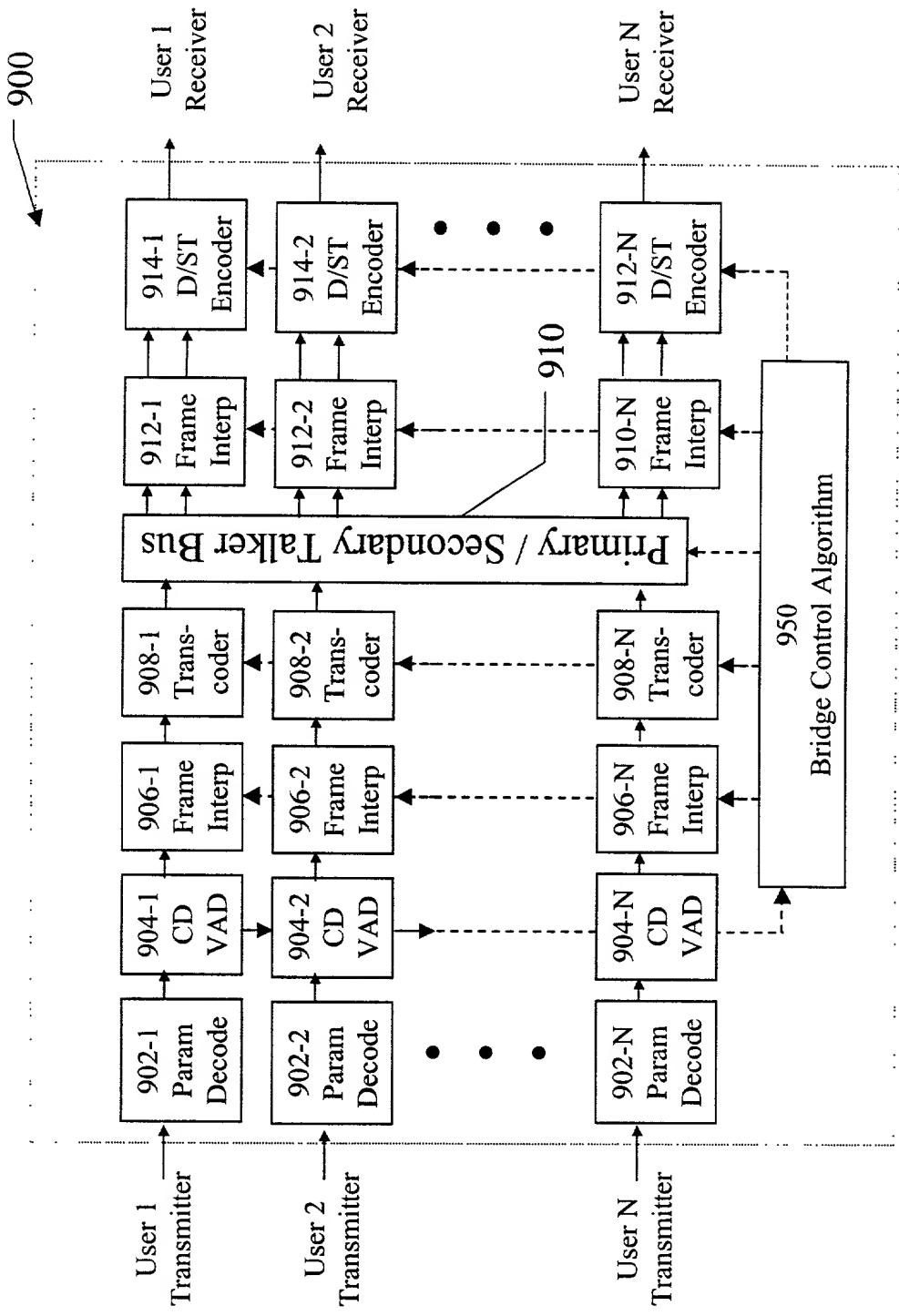


Figure 9: Compressed Domain Conference Bridge

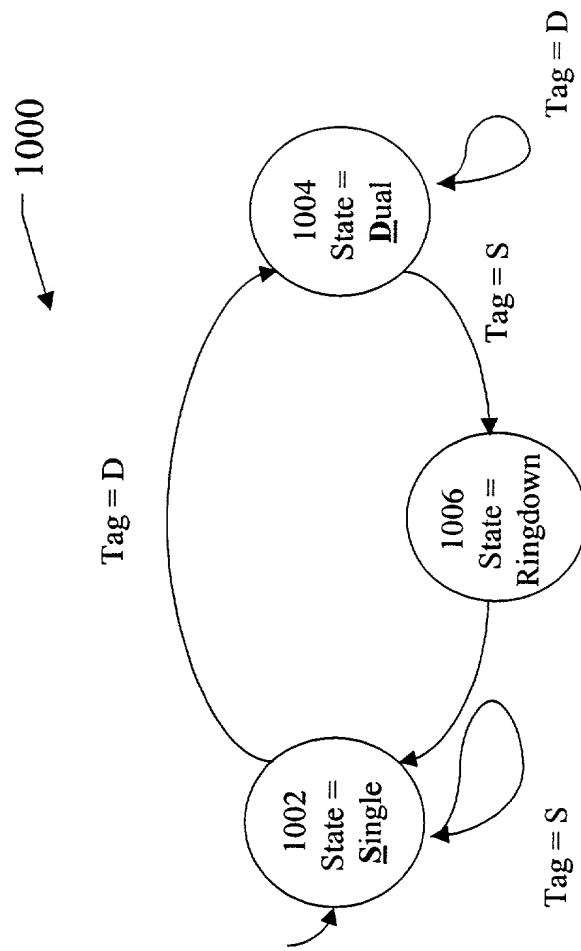


Figure 10: Dual Synthesizer State Diagram

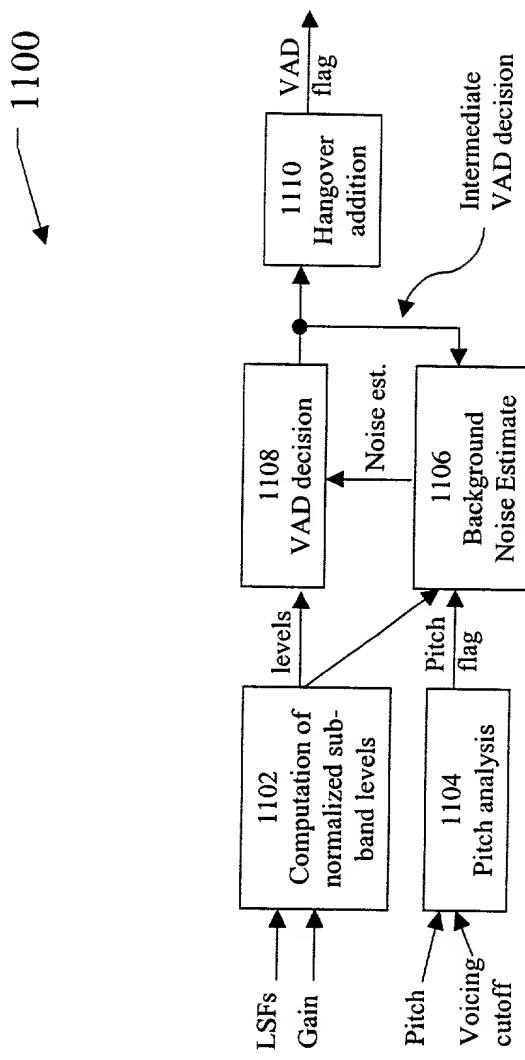


Figure 11: Compressed Domain Voice Activation Detector (CDVAD)

4 bit quantizer table
Frame 2

| |
|-----|
| L0 |
| L3 |
| L6 |
| L9 |
| L12 |
| L16 |
| L20 |
| L24 |
| L28 |
| D3 |
| D2 |
| D1 |
| D40 |
| D11 |
| D22 |
| D3 |

5 bit quantizer table
Frame 1

| |
|-----|
| L0 |
| L1 |
| L2 |
| L3 |
| L4 |
| L5 |
| L6 |
| L7 |
| L8 |
| L9 |
| L10 |
| L11 |
| L12 |
| L13 |
| L14 |
| L15 |
| L16 |
| L17 |
| L18 |
| L19 |
| L20 |
| L21 |
| L22 |
| L23 |
| L24 |
| L25 |
| L26 |
| L27 |
| L28 |
| L29 |
| L30 |
| L31 |

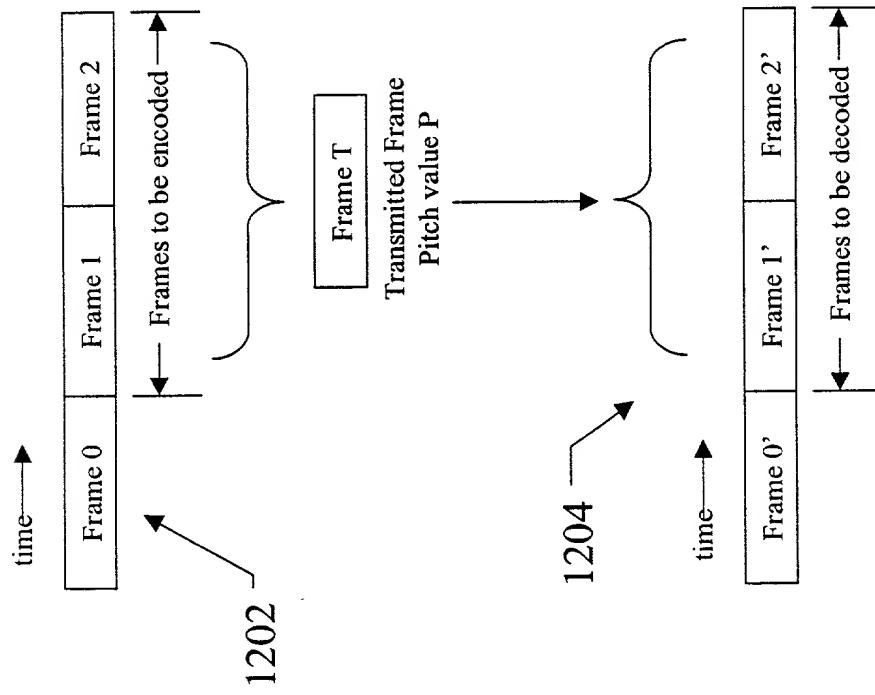


Figure 12B

| |
|-------------------|
| Frame T |
| Transmitted Frame |
| Pitch value P |
| D1 |
| D40 |
| D11 |
| D22 |
| D3 |

Transmitted Frame
Pitch value P

Figure 12A